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10/719,881	11/21/2003	Paul Matthijs	920522-95146	2916

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EXAMINER
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SHERMAN, STEPHEN G

ART UNIT	PAPER NUMBER
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2629

NOTIFICATION DATE	DELIVERY MODE
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01/03/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent-ch@btlaw.com

## Office Action Summary

Application No.

10/719,881

Applicant(s)

MATTHIJS ET AL.

Examiner

Stephen G. Sherman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

1. This office action is in response to the amendment filed 14 November 2007.

Claims 16-32 are pending.

### *Response to Arguments*

2. Applicant's arguments filed 14 November 2007 have been fully considered but they are not persuasive.

First, on page 5 of the response, the applicant states that new claim 16 corresponds to claim 1 without the "copy" alternative, however, the examiner would like to point out that the "copy" alternative is still present in claim 16. The applicant makes the same statement towards new claim 25 corresponding to claim, however, similarly new claim 25 still contains the "copy" alternative.

The applicant begins their arguments towards independent claim 16 on page 6 of the response. In the last paragraph of page 6 the applicant states that the claimed method provides a particular indication on the display device in the neighborhood of defective cells of this display device and that this particular indication is independent of the image displayed. The applicant continues on page 7 to state that Murakami discloses a method for identifying and correcting defective pixels in a digital image so that when the image is displayed after correction, it is difficult or impossible to detect the defects of the image. The applicant then summarizes by stating that Murakami does not

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disclose the limitations of the claims. The examiner respectfully disagrees. First of all, the claims do not disclose a limitations stating that the "particular identification" is independent of the image displayed, as argued by the applicant. Therefore, since column 15, lines 9-12, which state "The operator, while observing the digital image F displayed on the monitor 5, recognizes the defective pixel group DP in relation to the values of surrounding pixels, for example." Thus, the user observes the defective pixels of the digital image displayed on the display device, which means that Murakami teaches the claimed limitations. Furthermore, just because after indicating, emphasizing, or warning for the defective pixels the device of Murakami corrects the pixel defects does not mean that the claimed limitations are not taught as suggested by the applicant since Murakami still teaches what is claimed.

The applicant also argues that the method in Murakami and the method of the claimed invention belong to different technical areas (see page 7, 2nd to last paragraph), however, this does not matter as to the reference anticipating the claims.

The applicant then on page 9, argues that none of the references cited teach the aspects of the newly added claims 23 and 31. The examiner respectfully disagrees. As explained in the rejection found below, Murakami discloses the limitations of newly added claims 23 and 31, including that the image content of defective cells are adapted in a copy of said image, where column 14, lines 51-53 explain that the image is retrieved from memory, which means that it is a copy of an image. Therefore, the limitations of claims 23 and 31 are taught by Murakami.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 16-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 16, 23, 25, 31 and 32 all contain the limitations of “avoiding misinterpretation of an image displayed on a matrix display device due to defective cells in the matrix display device”, “obtaining information on the presence and the location of the defective cells in said matrix display device” and then contain the limitation “adapting the image content of the defective cells...so as to indicate, emphasize or warn for the presence of said defective cells in a copy of said image”. This renders the claims indefinite because the two beginning limitations appear to mean that the defective cells are physically present on the display device, while the last limitation requires that the defective cells are changed in a copy of the image, which appears to mean that the defective cells don't have to be physically present in the display device. Therefore, if the defective cells are a physical part of the display device, then how can the physical cells be adapted in a copy of said image? The examiner cannot possibly know what the applicant intends to claim by these limitations, however, for the purposes of examination, the examiner will assume that the defective cells do not have to be a

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physical part of the display but rather just cells that aren't displayed properly on the display.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 16-19, 22-28 and 31-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Murakami (US 5,982,946).

***Regarding claim 16***, Murakami discloses a method for avoiding misinterpretation of an image displayed on a matrix display due to defective cells in the matrix display, the method comprising:

obtaining information on the presence and the location of the defective cells in said matrix display (Figure 4 and column 15, lines 8-20, which explain that the user observes the image and designates an area which comprises a defective pixel such that the location and presence of defective pixels is obtained.), and on the basis of this information,

modulating the operation of said matrix display so as to indicate, emphasize or warn for the presence of said defective cells on the actual display of said image (Figure

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4 and column 15, lines 24-42, which explain that based upon the area designated by the user, an evaluation area parameter ER is displayed which emphasizes the presence of defective pixels on the actual display of the digital image.), or

adapting the image content of the defective pixels or of pixels in the neighborhood of the defective cells so as to indicate, emphasize or warn for the presence of said defective pixels in a copy of said image.

**Regarding claim 17**, Murakami discloses a method according to claim 16, wherein the information is obtained from data previously stored in a memory device (Column 15, lines 25-27 explain that the image was stored in memory 17, meaning that the information is obtained from data that was stored in a memory device.).

**Regarding claim 18**, Murakami discloses a method according to claim 17, comprising, while displaying the image on the matrix display supplying information on defective pixels to a user, based on the stored data (The image was stored in the memory 17, and then the image is displayed to the user, and while displaying the previously stored image, information about defective pixels is supplied to a user as explained in column 15, lines 9-20 and 25-40.).

**Regarding claim 19**, Murakami discloses a method according to claim 16, wherein, indicating, emphasizing or warning for the presence of at least one defective

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cell comprises visually marking the at least one defective cell on said matrix display device (Figure 5 shows that the defective pixels DP are marked on the display.).

**Regarding claim 22**, Murakami discloses a method according to claim 16, wherein the information on the presence of defective pixels is obtained by means of an image capturing device (Column 13, lines 6-17. Since the image is obtained by a scanner, i.e. image capturing device, and then the image is analyzed for defective pixels, the presence of the defective pixels is obtained by scanning in the image.).

**Regarding claim 23**, Murakami discloses a method for avoiding misinterpretation of a copy of an image displayed on a matrix display due to defective cells in the matrix display, the method comprising:

obtaining information on the presence and the location of the defective cells in said matrix display (Figure 4 and column 15, lines 8-20, which explain that the user observes the image and designates an area which comprises a defective pixel such that the location and presence of defective pixels is obtained.), and on the basis of this information,

adapting the image content of the defective pixels or of pixels in the neighborhood of the defective cells so as to indicate, emphasize or warn for the presence of said defective pixels in a copy of said image (Column 14, lines 51-53 explain that the image is retrieved from memory, which means that it is a copy of an image. Figure 4 and column 15, lines 24-42, explain that based upon the area



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designated by the user, an evaluation area parameter ER is displayed which emphasizes the presence of defective pixels on the display of the copy of a digital image.).

**Regarding claim 24**, Murakami discloses the method according to claim 23, wherein, the copy is a hard copy or an electronic copy (Column 14, lines 51-53 explain that the image is retrieved from memory, which means that it is an electronic copy of an image.).

**Regarding claim 25**, this claim is rejected under the same rationale as claim 16.

**Regarding claim 26**, this claim is rejected under the same rationale as claim 17.

**Regarding claim 27**, this claim is rejected under the same rationale as claim 18.

**Regarding claim 28**, this claim is rejected under the same rationale as claim 19.

**Regarding claim 31**, this claim is rejected under the same rationale as claim 23.

**Regarding claim 32**, this claim is rejected under the same rationale as claim 16.

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***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 20-21 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami (US 5,982,946) in view of Johnson et al. (US 2004/0164939).

***Regarding claim 20***, Murakami discloses a method according to claim 16.

Murakami fails to teach that the method further comprises showing the displayed image so that defective pixels are not located in a region of interest.

Johnson et al. disclose a method comprising showing a displayed image so that defective pixels are not located in a region of interest (Paragraph [0027] explains that if

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only part of the image is active that the active part avoids the weak diode, i.e. the image is shifted out of the region where the defect is.).

Therefore, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to show the displayed image so that the defective pixels would not be located in a region of interest as taught by Johnson et al. with the method taught by Murakami in order to allow for the proper viewing of the image without any defects in the image being viewable.

***Regarding claim 21***, Murakami discloses a method according to claim 16.

Murakami fails to teach that that the method further comprises shifting the displayed image so that a defective pixel is located in a flat image area.

Johnson et al. disclose a method comprising shifting a displayed image so that a defective pixel is located in a flat image area (Paragraph [0027] explains that if only part of the image is active that the active part avoids the weak diode, i.e. the image is shifted out of the region where the defect is, and since the display is flat, this will be a flat image area.).

Therefore, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to shift the displayed image so that the defective pixels would be located in a flat image area as taught by Johnson et al. with the method taught by Murakami in order to allow for the proper viewing of the image without any defects in the image being viewable.

***Regarding claim 29***, this claim is rejected under the same rationale as claim 20.

**Regarding claim 30**, this claim is rejected under the same rationale as claim 21.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SS

17 December 2007

AMR A. AWAD  
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Amr A. Awad', is written over a horizontal line.